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June 14, 2007

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Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Art Unit 1644

Attn: Mail Stop Amendment

Re: U.S. Utility Patent Application
Application No. 09/914,046; Filed: October 1, 2001
For: **Antibody Fragment-Targeted Immunoliposomes for Systemic Gene
Delivery**
Inventors: XU *et al.*
Our Ref: 2474.0010001/BJD/JKM

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Credit Card Payment Form (PTO-2038) in the amount of \$180.00 to cover the Information Disclosure Statement fee;
2. Second Supplemental Information Disclosure Statement;
3. List of cited references on Form PTO/SB/08A (1 sheet);
4. List of cited references on Form PTO/SB/08B (7 sheets);
5. Copies of references NPL1-NPL69 listed on Form PTO/SB/08B (69 documents); and
6. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier.

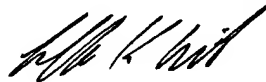
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Commissioner for Patents
June 14, 2007
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Jeffrey K. Mills
Agent for Applicants
Registration No. 56,413

BJD/JKM:bac
Enclosures

687213_1.DOC



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

XU *et al.*

Appl. No.: 09/914,046

Filed: October 1, 2001

For: **Antibody Fragment-Targeted
Immunoliposomes for Systemic
Gene Delivery**

Confirmation No.: 8537

Art Unit: 1644

Examiner: Dibrino, M.

Atty. Docket: 2474.0010001/BJD/JKM

**Second Supplemental Information Disclosure Statement
Under 37 C.F.R. § 1.97(c)**

Mail Stop Amendment

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying IDS Forms, PTO/SB/08A and PTO/SB/08B, are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Copies of documents **NPL1** to **NPL69** are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), copies of U.S. patents, **US1** and **US2**, cited on the attached IDS Form, PTO/SB/08A, are not submitted.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may

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not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

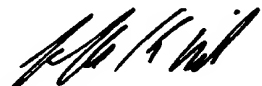
This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application. Attached is our PTO-2038 Credit Card Payment Form in the amount of \$180.00 payment amount in payment of the fee under 37 C.F.R. § 1.17(p).

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this patent application that the documents have been considered.

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Respectfully submitted,

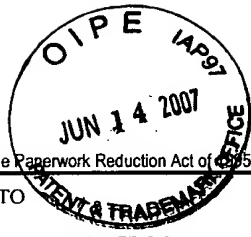
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Jeffrey K. Mills
Agent for Applicants
Registration No. 56,413

Date: June 14, 2007

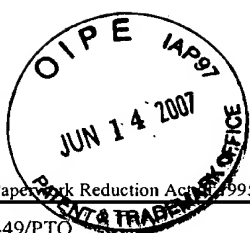
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| | | | | Application Number | 09/914,046 |
| | | | | Filing Date | October 1, 2001 |
| | | | | First Named Inventor | XU, Liang |
| | | | | Art Unit | 1644 |
| | | | | Examiner Name | Dibrino, M. |
| Sheet | 1 | of | 7 | Attorney Docket Number | 2474.0010001/BJD/JKM |

| NON PATENT LITERATURE DOCUMENTS | | | |
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| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
| | NPL1 | ALLEN, T.M., <i>et al.</i> , "A new strategy for attachment of antibodies to sterically stabilized liposomes resulting in efficient targeting to cancer cells," <i>Biochim. Biophys. Acta</i> 1237:99-108, Elsevier Science Inc. (1995) | |
| | NPL2 | ALLEN, T.M., <i>et al.</i> , "Antibody-Targeted Stealth [®] Liposomes" in <i>Stealth Liposomes</i> , Lasic, D.D. and Martin, F.J., eds., CRC Press Inc., Boca Raton, FL, pp. 233-244 (1995) | |
| | NPL3 | AOKI, K., <i>et al.</i> , "Liposome-mediated <i>in Vivo</i> Gene Transfer of Antisense K-ras Construct Inhibits Pancreatic Tumor Dissemination in the Murine Peritoneal Cavity," <i>Cancer Res.</i> 55:3810-3816, American Association for Cancer Research (1995) | |
| | NPL4 | BAJORIA, R., and CONTRACTOR, S.F., "Effect of Surface Charge of Small Unilamellar Liposomes on Uptake and Transfer of Carboxyfluorescein across the Perfused Human Term Placenta," <i>Pediatr. Res.</i> 42:520-527, International Pediatrics Research Foundation, Inc. (1997) | |
| | NPL5 | BAJORIA, R., <i>et al.</i> , "Endocytotic uptake of small unilamellar liposomes by human trophoblast cells in culture," <i>Hum. Reprod.</i> 12:1343-1348, European Society for Human Reproduction and Embryology (1997) | |
| | NPL6 | BRISTOW, R.G., <i>et al.</i> , "The p53 gene as a modifier of intrinsic radiosensitivity: implications for radiotherapy," <i>Radiother. Oncol.</i> 40:197-223, Elsevier Scientific Publishers (1996) | |
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| | NPL8 | CHENG, P.-W., "Receptor Ligand-Facilitated Gene Transfer: Enhancement of Liposome-Mediated Gene Transfer and Expression by Transferrin," <i>Hum. Gene Ther.</i> 7:275-282, Mary Ann Liebert, Inc. (1996) | |
| | NPL9 | CHIARUGI, V., <i>et al.</i> , "Cox-2, iNOS and p53 as play-makers of tumor angiogenesis (Review)," <i>Int. J. Mol. Med.</i> 2:715-719, D.A. Spandidos (1998) | |
| | NPL10 | CLARK, P.R., and HERSH, E.M., "Cationic lipid-mediated gene transfer: Current concepts," <i>Curr. Opin. Mol. Ther.</i> 1:158-176, Current Drugs Ltd. (April 1999) | |

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| Examiner Signature | | Date Considered | |
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| | | | | Filing Date | October 1, 2001 |
| | | | | First Named Inventor | XU, Liang |
| | | | | Art Unit | 1644 |
| | | | | Examiner Name | Dibrino, M. |
| Sheet | 2 | of | 7 | Attorney Docket Number | 2474.0010001/BJD/JKM |

| NON PATENT LITERATURE DOCUMENTS | | | |
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| | NPL11 | CRISTIANO, R.J., and CURIEL, D.T., "Strategies to accomplish gene delivery via the receptor-mediated endocytosis pathway," <i>Cancer Gene Ther.</i> 3:49-57, Appleton & Lange (1996) | |
| | NPL12 | DRUMMOND, D.C., <i>et al.</i> , "Optimizing Liposomes for Delivery of Chemotherapeutic Agents to Solid Tumors," <i>Pharmacol. Rev.</i> 51:691-743, The American Society for Pharmacology and Experimental Therapeutics (December 1999) | |
| | NPL13 | DUBÉ, D., <i>et al.</i> , "Preparation and Tumor Cell Uptake of Poly(N-isopropylacrylamide) Folate Conjugates," <i>Bioconjugate Chem.</i> 13:685-692, American Chemical Society (May-June 2002) | |
| | NPL14 | ELLIOTT, R.L., <i>et al.</i> , "Breast Carcinoma and the Role of Iron Metabolism: A Cytochemical, Tissue Culture, and Ultrastructural Study," <i>Ann. N.Y. Acad. Sci.</i> 698:159-166, New York Academy of Sciences (1993) | |
| | NPL15 | FELGNER, P.L., <i>et al.</i> , "Improved Cationic Lipid Formulations for <i>In Vivo</i> Gene Therapy," <i>Ann. N.Y. Acad. Sci.</i> 772:126-139, New York Academy of Sciences (1995) | |
| | NPL16 | FORSSEN, E., and WILLIS, M., "Ligand-targeted liposomes," <i>Adv. Drug Deliv. Rev.</i> 29:249-271, Elsevier Science B.V. (1998) | |
| | NPL17 | FUJIWARA, T., <i>et al.</i> , "A Retroviral Wild-Type <i>p53</i> Expression Vector Penetrates Human Lung Cancer Spheroids and Inhibits Growth by Inducing Apoptosis," <i>Cancer Res.</i> 53:4129-4133, American Association for Cancer Research (1993) | |
| | NPL18 | FUJIWARA, T., <i>et al.</i> , "Induction of Chemosensitivity in Human Lung Cancer Cells <i>in vivo</i> by Adenovirus-mediated Transfer of the Wild-Type <i>p53</i> Gene," <i>Cancer Res.</i> 54:2287-2291, American Association for Cancer Research (1994) | |
| | NPL19 | HAMADA, K., <i>et al.</i> , "Adenovirus-mediated Transfer of a Wild-Type <i>p53</i> Gene and Induction of Apoptosis in Cervical Cancer," <i>Cancer Res.</i> 56:3047-3054, American Association for Cancer Research (1996) | |
| | NPL20 | HUWYLER, J., <i>et al.</i> , "Brain drug delivery of small molecules using immunoliposomes," <i>Proc. Natl. Acad. Sci. USA</i> 93:14164-14169, National Academy of Sciences (1996) | |

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| | | | | First Named Inventor | XU, Liang |
| | | | | Art Unit | 1644 |
| | | | | Examiner Name | Dibrino, M. |
| Sheet | 3 | of | 7 | Attorney Docket Number | 2474.0010001/BJD/JKM |

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| | NPL21 | JOHNSON, P., <i>et al.</i> , "Expression of Wild-Type p53 Is Not Compatible with Continued Growth of p53-Negative Tumor Cells," <i>Mol. Cell Biol.</i> 11:1-11, American Society for Microbiology (1991) | |
| | NPL22 | KERR, J.F.R., <i>et al.</i> , "Apoptosis: Its Significance in Cancer and Cancer Therapy," <i>Cancer</i> 73:2013-2026, Wiley (1994) | |
| | NPL23 | KIRPOTIN, D., <i>et al.</i> , "Sterically Stabilized Anti-HER2 Immunoliposomes: Design and Targeting to Human Breast Cancer Cells <i>in Vitro</i> ," <i>Biochemistry</i> 36:66-75, American Chemical Society (1997) | |
| | NPL24 | KONING, G.A., <i>et al.</i> , "Antiproliferative effect of immunoliposomes containing 5-fluorodeoxyuridine-dipalmitate on colon cancer cells," <i>Br. J. Cancer</i> 80:1718-1725, Cancer Research Campaign (August 1999) | |
| | NPL25 | KONING, G.A., <i>et al.</i> , "Selective transfer of a lipophilic prodrug of 5-fluorodeoxyuridine from immunoliposomes to colon cancer cells," <i>Biochim. Biophys. Acta</i> 1420:153-167, Elsevier Science B.V. (August 1999) | |
| | NPL26 | KONISHI, H., <i>et al.</i> , "Targeting Strategy for Gene Delivery to Carcinoembryonic Antigen-Producing Cancer Cells by Retrovirus Displaying a Single-Chain Variable Fragment Antibody," <i>Hum. Gene Ther.</i> 9:235-248, Mary Ann Liebert, Inc. (1998) | |
| | NPL27 | LASIC, D.D., <i>et al.</i> , "Sterically stabilized liposomes in cancer therapy and gene delivery," <i>Curr. Opin. Mol. Ther.</i> 1:177-185, Current Drugs Ltd. (April 1999) | |
| | NPL28 | LASIC, D.D., and PAPAHAJDOPOULOS, D., "Liposomes Revisited," <i>Science</i> 267:1275-1276, American Association for the Advancement of Science (1995) | |
| | NPL29 | LEE, R.J. and HUANG, L., "Folate-targeted, Anionic Liposome-entrapped Polylysine-condensed DNA for Tumor Cell-specific Gene Transfer," <i>J. Biol. Chem.</i> 271:8481-8487, American Society for Biochemistry and Molecular Biology, Inc. (1996) | |
| | NPL30 | LEWIS, J.G., <i>et al.</i> , "A serum-resistant cytofectin for cellular delivery of antisense oligodeoxynucleotides and plasmid DNA," <i>Proc. Natl. Acad. Sci. USA</i> 93:3176-3181, National Academy of Sciences (1996) | |

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| | NPL31 | LI, S., and HUANG, L., "Functional Pleomorphism of Liposomal Gene Delivery Vectors--Lipoplex and Lipopolyplex," in <i>Liposomes--Rational Design</i> , Janoff, A.S., ed., Marcel Dekker, Inc., New York, NY, pp. 89-124 (1998) | |
| | NPL32 | LIU, T.J., <i>et al.</i> , "Growth Suppression of Human Head and Neck Cancer Cells by the Introduction of a Wild-Type <i>p53</i> Gene via a Recombinant Adenovirus," <i>Cancer Res.</i> 54:3662-3667, American Association for Cancer Research (1994) | |
| | NPL33 | LOWE, S.W., "Cancer therapy and <i>p53</i> ," <i>Curr. Opin. Oncol.</i> 7:547-553, Rapid Science Publishers (1995) | |
| | NPL34 | MARTIN, F., <i>et al.</i> , "Retroviral Vector Targeting to Melanoma Cells by Single-Chain Antibody Incorporation in Envelope," <i>Human Gene Ther.</i> 9:737-746, Mary Ann Liebert, Inc. (1998) | |
| | NPL35 | MASSING, U., "Cancer therapy with liposomal formulations of anticancer drugs," <i>Int. J. Clin. Pharmacol. Ther.</i> 35:87-90, Dustri-Verlag Dr. K. Feistle (1997) | |
| | NPL36 | MATLASHEWSKI, G., "p53: Twenty years on, Meeting Review," <i>Oncogene Rev.</i> 18:7618-7620, Stockton Press (December 1999) | |
| | NPL37 | MIYAMOTO, T., <i>et al.</i> , "Transferrin receptor in oral tumors," <i>Int. J. Oral Maxillofac. Surg.</i> 23:430-433, Munksgaard (1994) | |
| | NPL38 | MIYASHITA, T., <i>et al.</i> , "Tumor suppressor p53 is a regulator of <i>bcl-2</i> and <i>bax</i> gene expression in vitro and in vivo," <i>Oncogene</i> 9:1799-1805, Macmillan Press Ltd. (1994) | |
| | NPL39 | NAG, A., <i>et al.</i> , "A Colorimetric Estimation of Polyethyleneglycol-Conjugated Phospholipid in Stealth Liposomes," <i>Anal. Biochem.</i> 250:35-43, Academic Press (1997) | |
| | NPL40 | NAM, S.M., <i>et al.</i> , "Sterically Stabilized Anti-G _{M3} , anti-Le ^x Immunoliposomes: Targeting to B16BL6, HRT-18 Cancer Cells," <i>Oncol. Res.</i> 11:9-16, Cognizant Communication Corporation (July 1999) | |

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| | | | | Filing Date | October 1, 2001 |
| | | | | First Named Inventor | XU, Liang |
| | | | | Art Unit | 1644 |
| | | | | Examiner Name | Dibrino, M. |
| Sheet | 5 | of | 7 | Attorney Docket Number | 2474.0010001/BJD/JKM |

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| | | | | Art Unit | 1644 |
| | | | | Examiner Name | Dibrino, M. |
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